

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (Currently Amended): A method for producing a recombinant glycoprotein in a unicellular or filamentous fungus non-human eukaryotic host cell that expresses a glycosidase activity, the method comprising the step of diminishing or depleting the activity of one or more enzymes in the host cell that transfers a sugar residue to the 1,6 arm of a lipid-linked oligosaccharide structure, and introducing into the host cell one or more nucleic acids encoding an α -1,2 mannosidase activity and a GnT1 activity; wherein said method results in the production within the host cell of recombinant glycoproteins having N-glycans attached thereto comprising GlcNAcMan_XGlcNAc₂ core structures, wherein X is 3; or 4, or 5.

Claim 2 (Previously presented): The method of claim 1, wherein the at least one glycosidase activity is expressed from a nucleic acid molecule introduced into the host cell.

Claim 3 (Previously presented): The method of claim 2, wherein the at least one glycosidase activity is a mannosidase activity.

Claim 4 (Canceled)

Claim 5 (Canceled)

Claim 6 (Currently Amended): The method of claim 1, further comprising the step of expressing within the unicellular or filamentous fungus host cell one or more glycosidase enzyme activities, selected from glycosidase and glycosyltransferase activities, to produce a GlcNAc₂Man₃GlcNAc₂ structure.

Claim 7 (Previously presented): The method of claim 6, wherein the one or more enzyme activities is selected from α -1,2 mannosidase, α -1,3 mannosidase and GnTII activities.

Claim 8 (Previously presented): The method of claim 1, wherein at least one diminished or depleted enzyme is selected from the group consisting of an enzyme having dolichyl-P-Man:Man₅GlcNAc₂-

PP-dolichyl alpha-1,3 mannosyltransferase activity; an enzyme having dolichyl-P-Man:Man₆GlcNAc₂-PP-dolichyl alpha-1,2 mannosyltransferase activity and an enzyme having dolichyl-P-Man:Man₇GlcNAc₂-PP-dolichyl alpha-1,6 mannosyltransferase activity.

Claim 9 (Previously presented): The method of claim 1, wherein the diminished or depleted enzyme has dolichyl-P-Man:Man₅GlcNAc₂-PP-dolichyl alpha-1,3 mannosyltransferase activity.

Claim 10 (Previously presented): The method of claim 1, wherein the enzyme is diminished or depleted by mutation of a host cell gene encoding the enzymatic activity.

Claim 11 (Previously presented): The method of claim 10, wherein the mutation is a partial or total deletion of a host cell gene encoding the enzymatic activity.

Claim 12 (Previously presented): The method of claim 1, wherein the attached N glycans have seven or fewer mannose residues.

Claim 13 (Canceled)

Claim 14 (Previously presented): The method of claim 1, wherein the glycoprotein comprises one or more sugars selected from the group consisting of galactose, GlcNAc, sialic acid, and fucose.

Claim 15 (Previously presented): The method of claim 1, wherein the glycoprotein comprises at least one oligosaccharide branch comprising the structure NeuNAc-Gal-GlcNAc-Man.

Claim 16 (Canceled):

Claim 17 (Currently Amended): The method of claim 1, wherein the unicellular or filamentous fungus host cell is selected from the group consisting of *Pichia pastoris*, *Pichia finlandica*, *Pichia trehalophila*, *Pichia koclamae*, *Pichia membranaefaciens*, *Pichia opuntiae*, *Pichia thermotolerans*, *Pichia salictaria*, *Pichia guercuum*, *Pichia pijperi*, *Pichia stipitis*, *Pichia methanolica*, *Pichia* sp., *Saccharomyces cerevisiae*, *Saccharomyces* sp., *Hansenula polymorpha*, *Kluyveromyces* sp., *Candida*

albicans, *Aspergillus nidulans*, *Aspergillus niger*, *Aspergillus oryzae*, *Trichoderma reesei*, *Chrysosporium lucknowense*, *Fusarium sp.*, *Fusarium gramineum*, *Fusarium venenatum* and *Neurospora crassa*.

Claims 18-58. (Cancelled)

Claim 59 (Previously presented): A method for producing a human-like glycoprotein in a non-human eukaryotic host cell comprising the step of diminishing or depleting from the host cell an *alg* gene activity and introducing into the host cell at least one glycosidase activity.

Claim 60-65 (Cancelled)